Oroville Facilities Relicensing
FERC Project No. 2100

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

SP–G2 -- Task 3
Appendix C -- Plate 3
Channel Changes -- 1992 - 2002
Hour Riffle -- Transect 2
RM 56.26

Prepared by: JHM -- DWR	Date 8/20/04	Filename CrossSectionComparisons--IFIM-jhm-

Elevation in Feet

Vertical Exaggeration: 10x

Gravel Pit Operations

No Vertical Exaggeration

Channel

Horizontal Stationing in Feet

Control Points from 1991 survey not located; 1991 cross-section approximately located.

EP-1 Sta 0+00.00

EP-2 Sta 11+23.39

0.30'

2002 Thalweg

1991 Thalweg

LEGEND

— 1991 IFIM Surveys
— 1997 2-foot contour mapping
— August 2002 Survey

— 1991 Water Surface
— 2002 Water Surface

CONTROL POINT DATA

EP-1 (no monument)
Northing: 2281149.383
Easting: 6668285.232
Elevation:123.54'

EP-2 (no monument)
Northing: 2281156.734
Easting: 6667161.869
Elevation:100.08'

TRANSECT DATA

Length (2002): 1123.39'
Length (1991): 362.00'

Azimuth: 89°37'30"
Azimuth: 89°37'30"

GAGE DATA (from USGS)

Oroville Gage:
7/20/92:   626cfs
12/19/02: 628cfs

Gridley Gage:
7/20/92:   3070cfs
12/19/02: 1858cfs

Notes:

1) Land surveys, depth soundings, and velocities for the 1992 IFIM surveys were conducted on July 20, 1992.

2) Assumed elevations for the control points were converted to actual elevations by a level survey performed by DWR-Land and Right-of-Way in June 1996.

3) The 1997 cross-section was generated from 2-foot contour topographic mapping from the U.S. Army Corps of Engineers (COE) Comprehensive Study. The actual cross-section was generated using Land Developer and AutoCad software.

4) The 2002 cross-section was surveyed in June 2002. Coordinates for the IFIM control points were generated using a RTK GPS survey with a Trimble backpack 4700 receiver. Distances and elevations were measured along section with conventional total station surveying equipment.

5) Elevations are referenced to the National Geodetic Vertical Datum of 1929 (NGVD29).